CLAIMS

What is claimed is:

1. A servo controller comprising:

a position feedback correction unit for correcting a position feedback signal based on a self-axis position and an other-axis position;

a position control unit for performing, according to a corrected position feedback signal outputted from the position feedback correction unit, positional control to output a velocity command;

a velocity feedback correction unit for correcting a velocity feedback signal based on the self-axis velocity and the other-axis velocity;

a velocity control unit for outputting a feedback torque command based on the velocity command outputted from the position control unit, and on a corrected velocity feedback signal outputted from the velocity feedback correction unit;

a model torque calculation unit for multiplying the model acceleration by a self-axis inertia preset value to output a model torque; and

an accumulator for calculating a torque command based on the model torque and the feedback torque command.

2. A servo controller according to claim 1, wherein, in the position

feedback correction unit, the between-axes positional deviation, filtered and gained, that is the difference between the self-axis position and the other-axis position, is used to correct the position feedback signal.

3. A servo controller according to claim 2, wherein, in the position feedback correction unit, the gain applied to the between-axes positional deviation that is the difference between the self-axis position and the other-axis position is variable.

4. A servo controller according to claim 1, wherein, in the velocity feedback correction unit, the between-axes velocity deviation, filtered and gained, that is the difference between the self-axis velocity and the other-axis velocity, is used to correct the velocity feedback signal.

5. A servo controller according to claim 4, wherein, in the velocity feedback correction unit, the gain applied to the between-axes velocity deviation that is the difference between the self-axis velocity and the other-axis velocity is variable.

6. A servo controller comprising:

a reference model control unit for calculating, based on a position command, a model position and a model acceleration;

a position control unit for performing, according to the difference between the model position and a self-axis position,

positional control to output a velocity command;

a velocity control unit for outputting a feedback torque command based on the velocity command outputted from the position control unit, and on the self-axis velocity;

a model torque calculation unit for correcting, according to the self-axis position and an other-axis position, the model acceleration to calculate a model torque; and

an accumulator for calculating a torque command based on the model torque and the feedback torque command.

7. A servo controller according to claim 6, wherein:

the reference model control unit is configured so as to calculate, based on the position command, a model position, a model velocity, and a model acceleration; and

the velocity control unit outputs the feedback torque command based on the velocity command outputted from the position control unit, on the model velocity, and on the self-axis velocity.

8. A servo controller according to claim 6 or claim 7, wherein, in the model torque correction unit, in accordance with time or with a waveform of the velocity command, the correction unit's correction operation is started and stopped, or correction gains are changed.

9. A servo controller according to any of claims 6-8, wherein, in the model torque correction unit, polarity is inverted using the sign of the

inputted model acceleration having been filtered through a high-pass filter.

10. A servo controller comprising:

a reference model control unit for calculating, based on a position command, a model position and a model acceleration;

a position feedback correction unit for correcting a position feedback signal based on a self-axis position and an other-axis position;

a position control unit for performing, according to the difference between the model position and a corrected position feedback signal outputted from the position feedback correction unit, positional control to output a velocity command;

a velocity feedback correction unit for correcting a velocity feedback signal based on the self-axis velocity and the other-axis velocity;

a velocity control unit for outputting a feedback torque command based on the velocity command outputted from the position control unit, and on a corrected velocity feedback signal outputted from the velocity feedback correction unit;

a model torque calculation unit for correcting, according to an other-axis model acceleration, to the self-axis position, and to the other-axis position, the model acceleration, to calculate a model torque; and

an accumulator for calculating a torque command based on

the model torque and the feedback torque command.

11. A servo controller according to claim 10, wherein:

the reference model control unit is configured so as to calculate, based on the position command, a model position, a model velocity, and a model acceleration; and

the velocity control unit outputs the feedback torque command based on the velocity command outputted from the position control unit, on the model velocity, and on the corrected velocity feedback signal outputted from the velocity feedback correction unit.